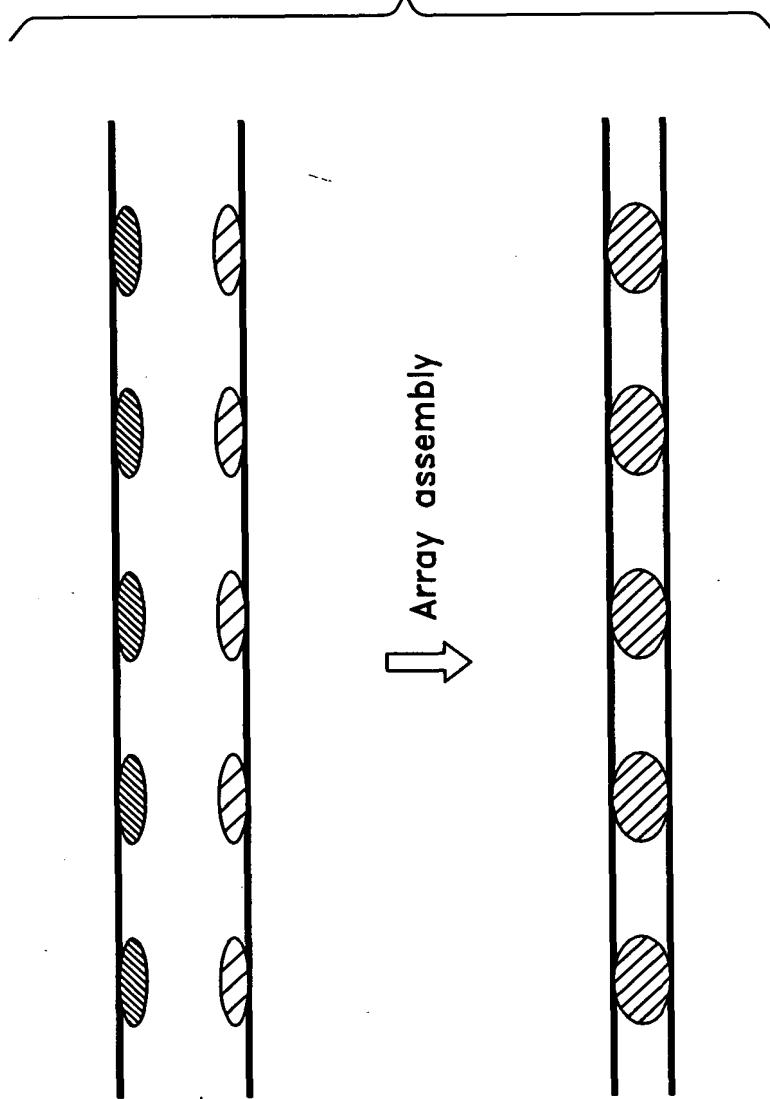


Fig. 1



01008 U.S. PTO
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06/23/03

2/30

Fig. 2

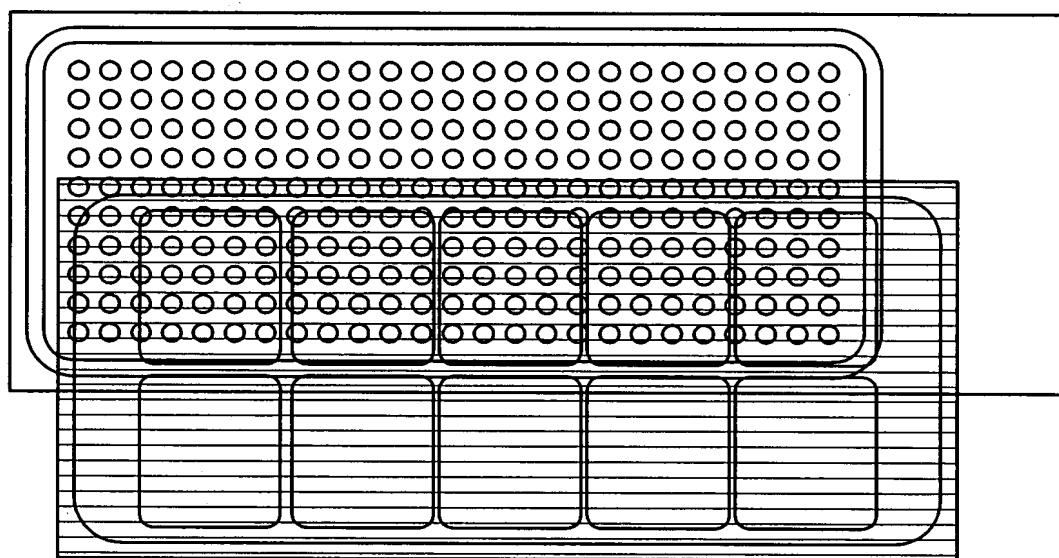
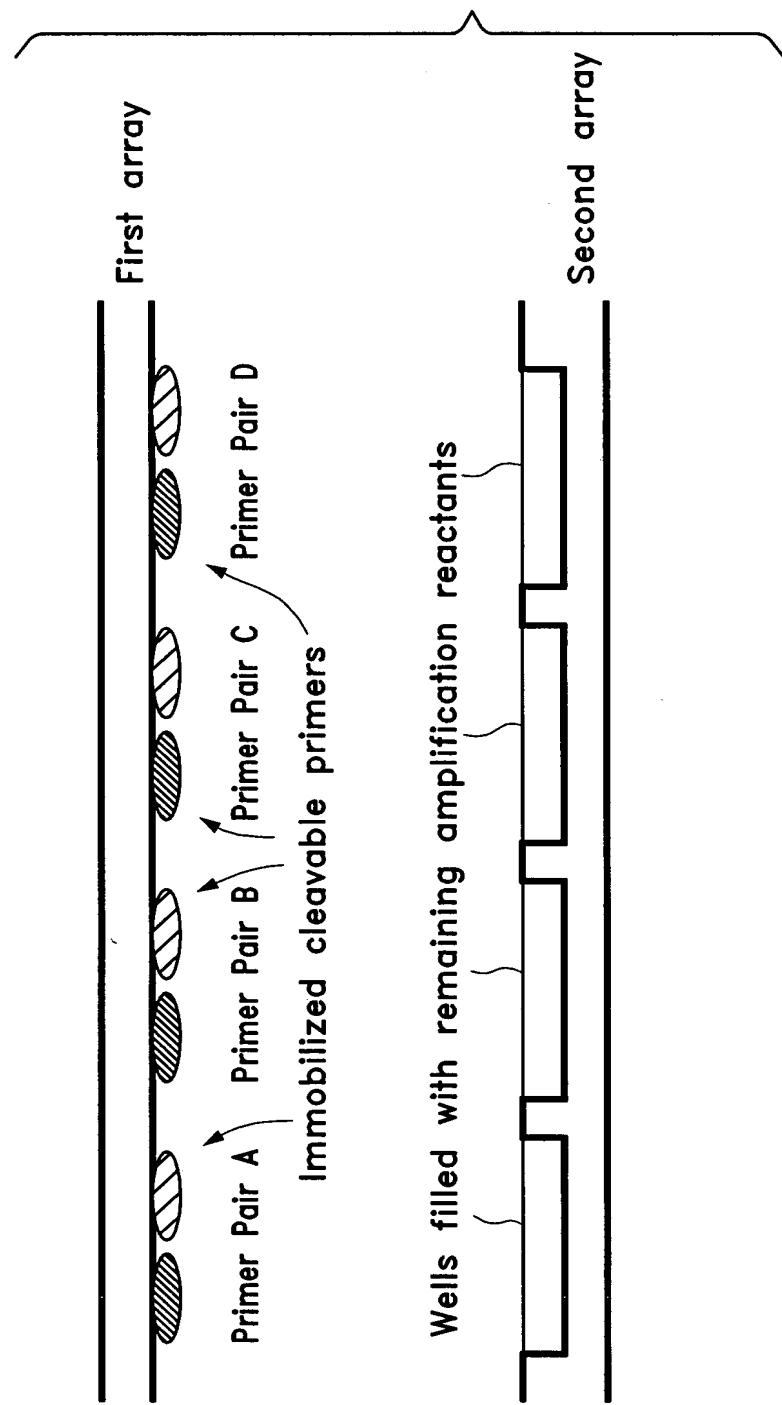
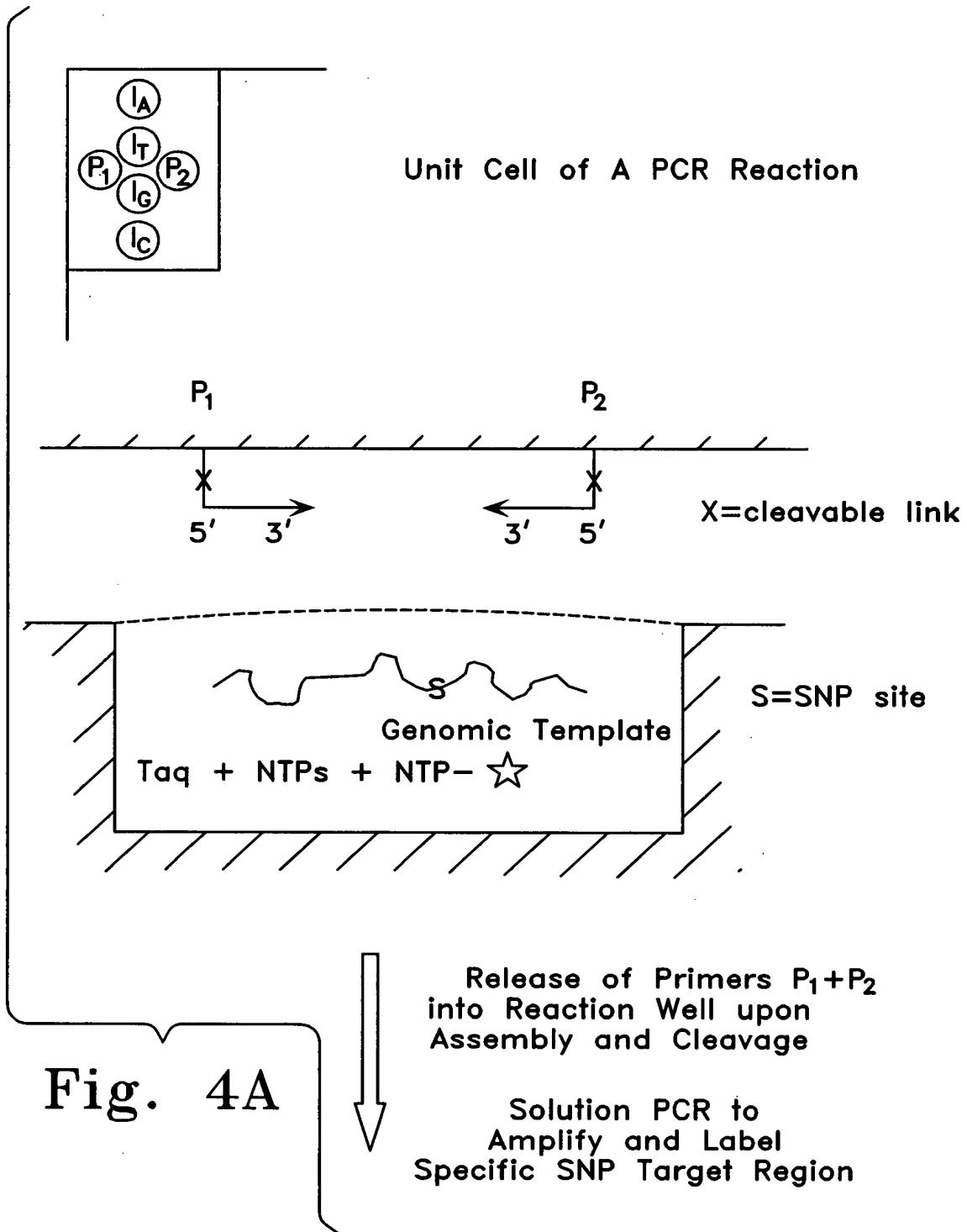
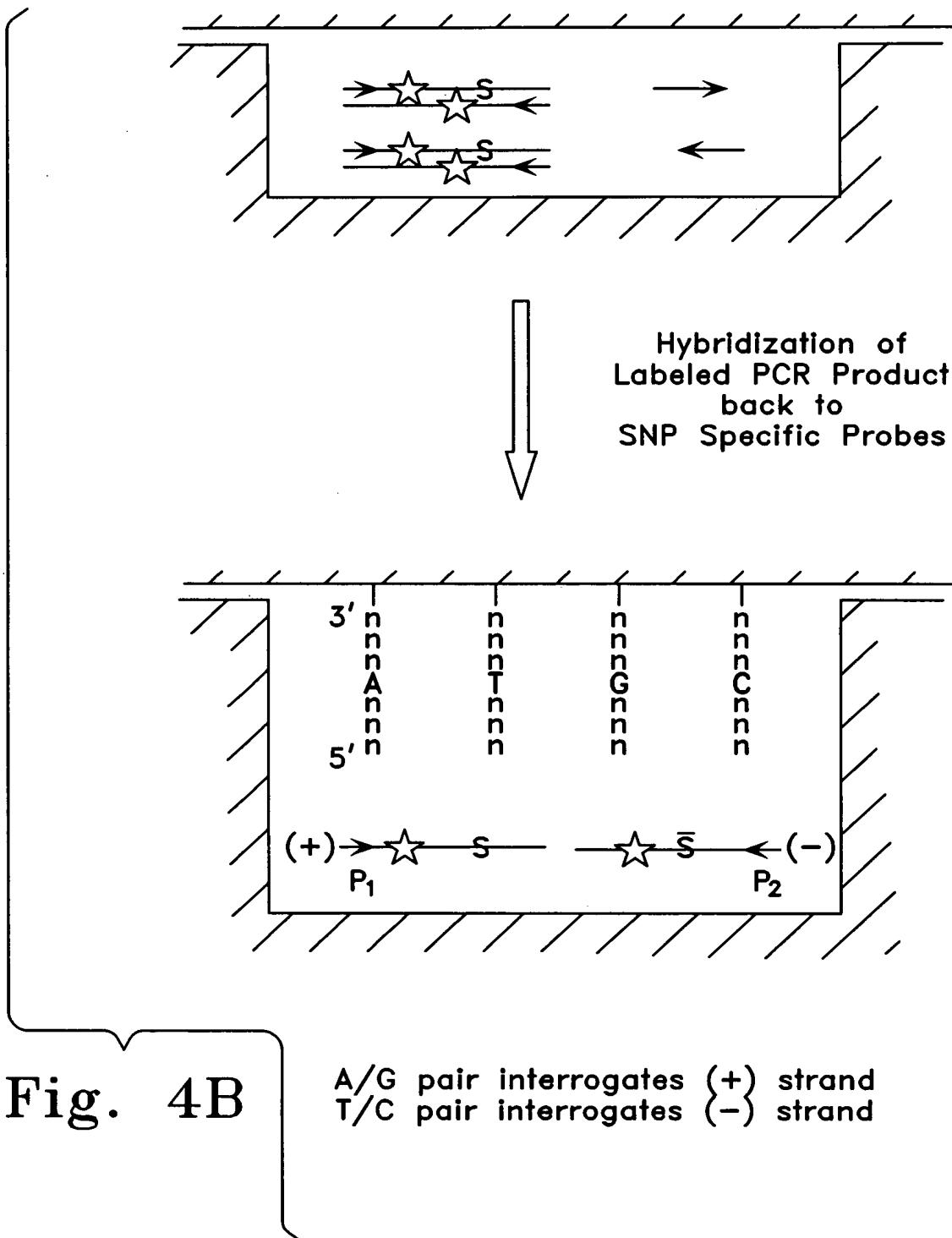


Fig. 3





5 / 30



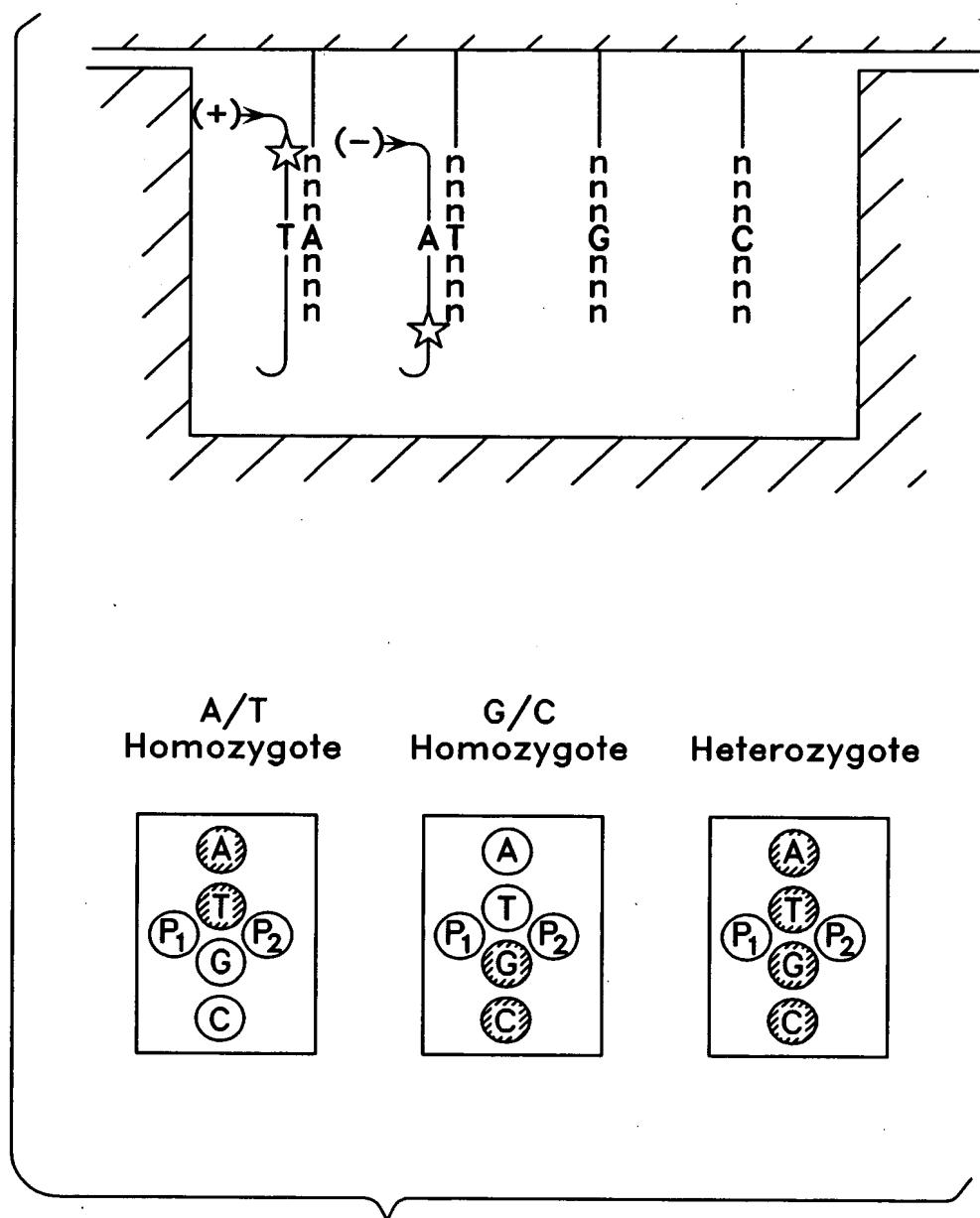
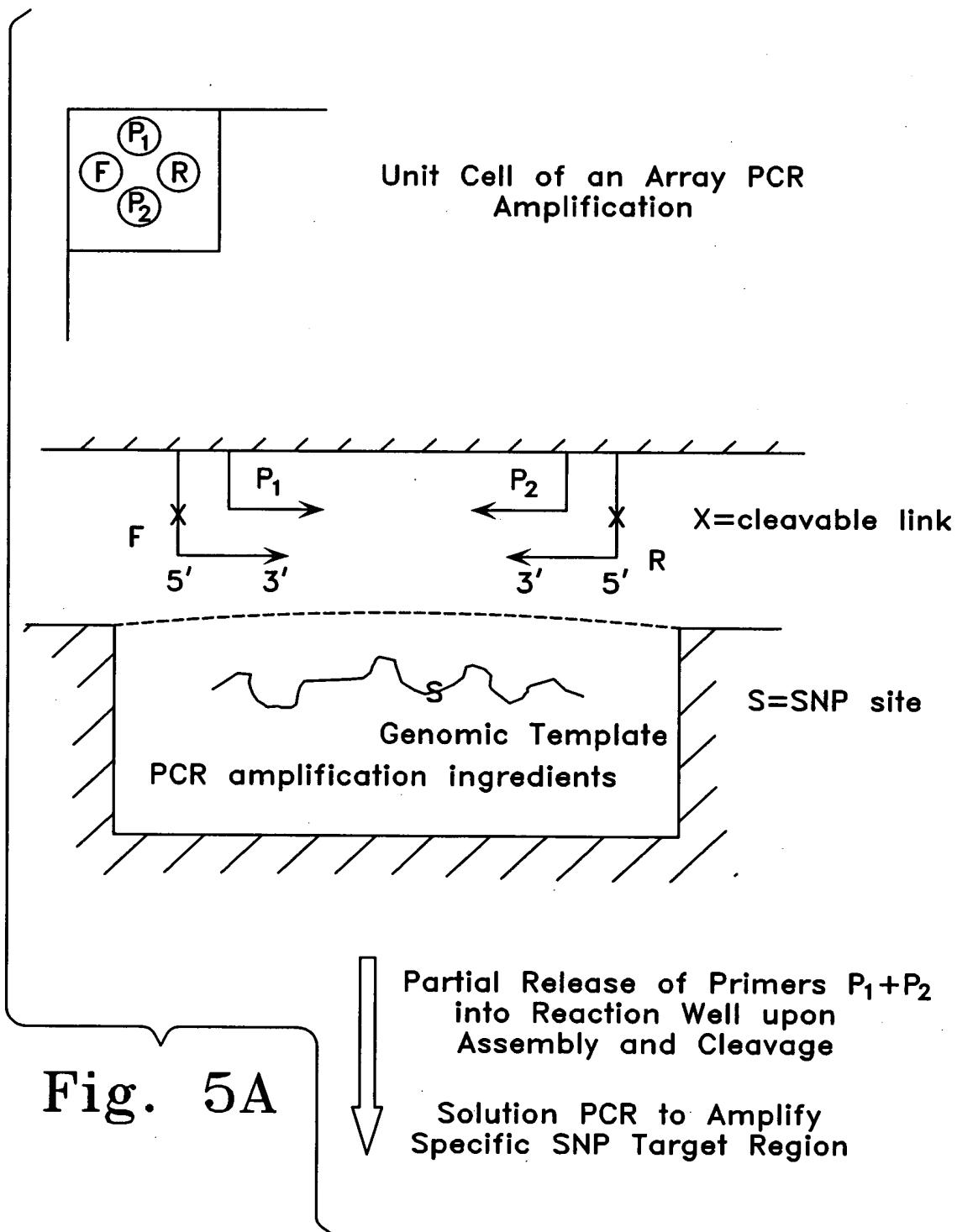
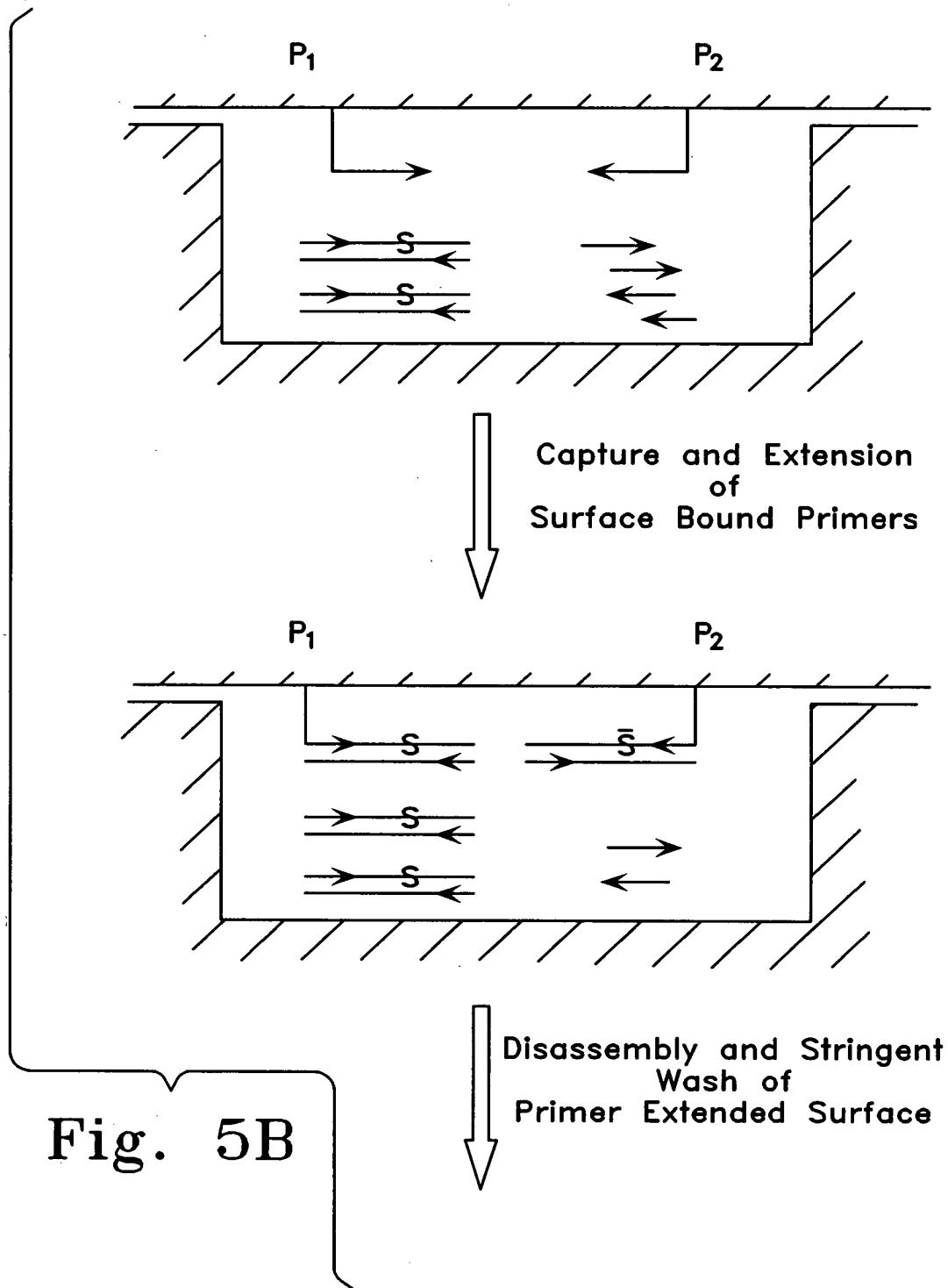
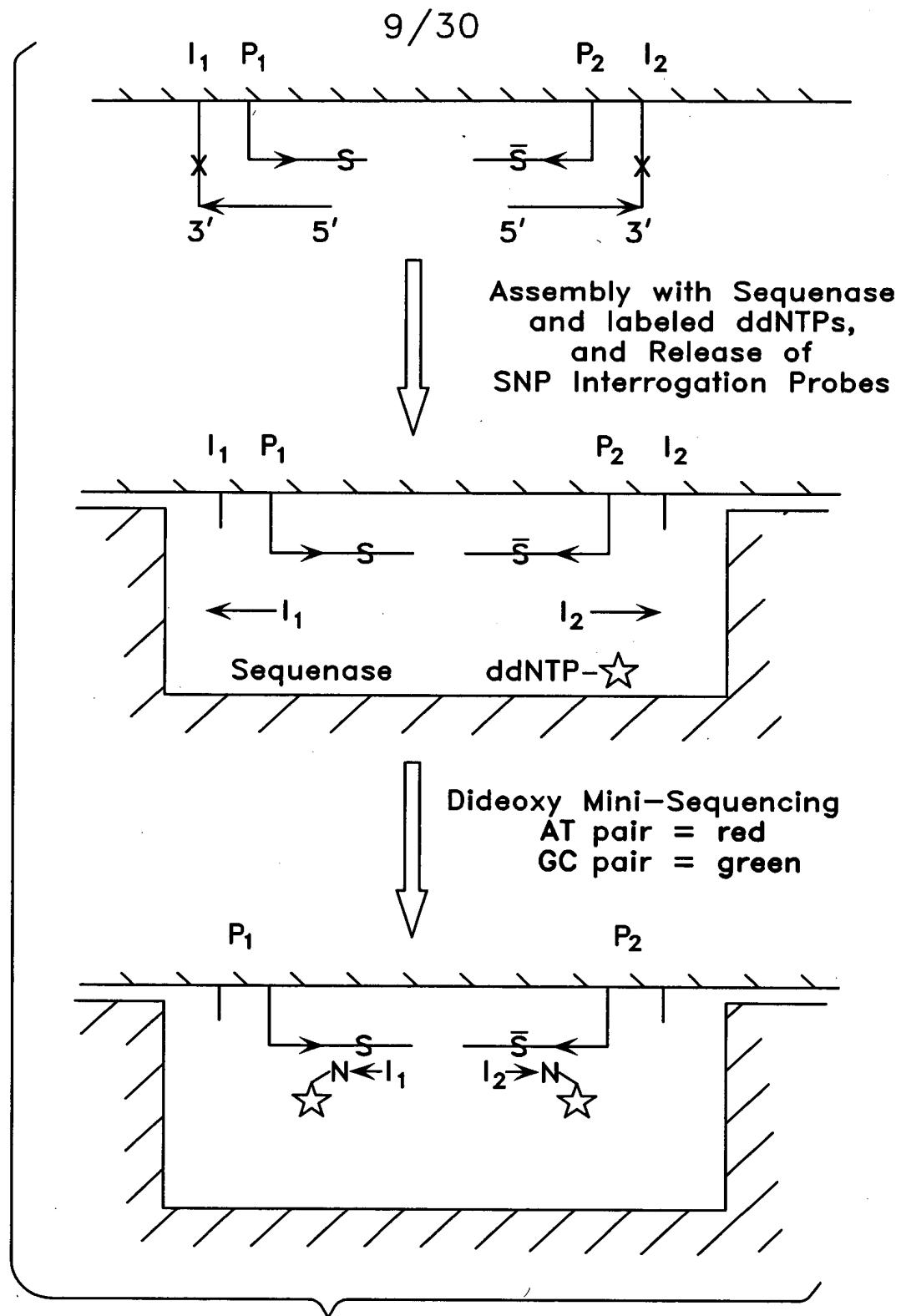


Fig. 4C

7/30







10/30

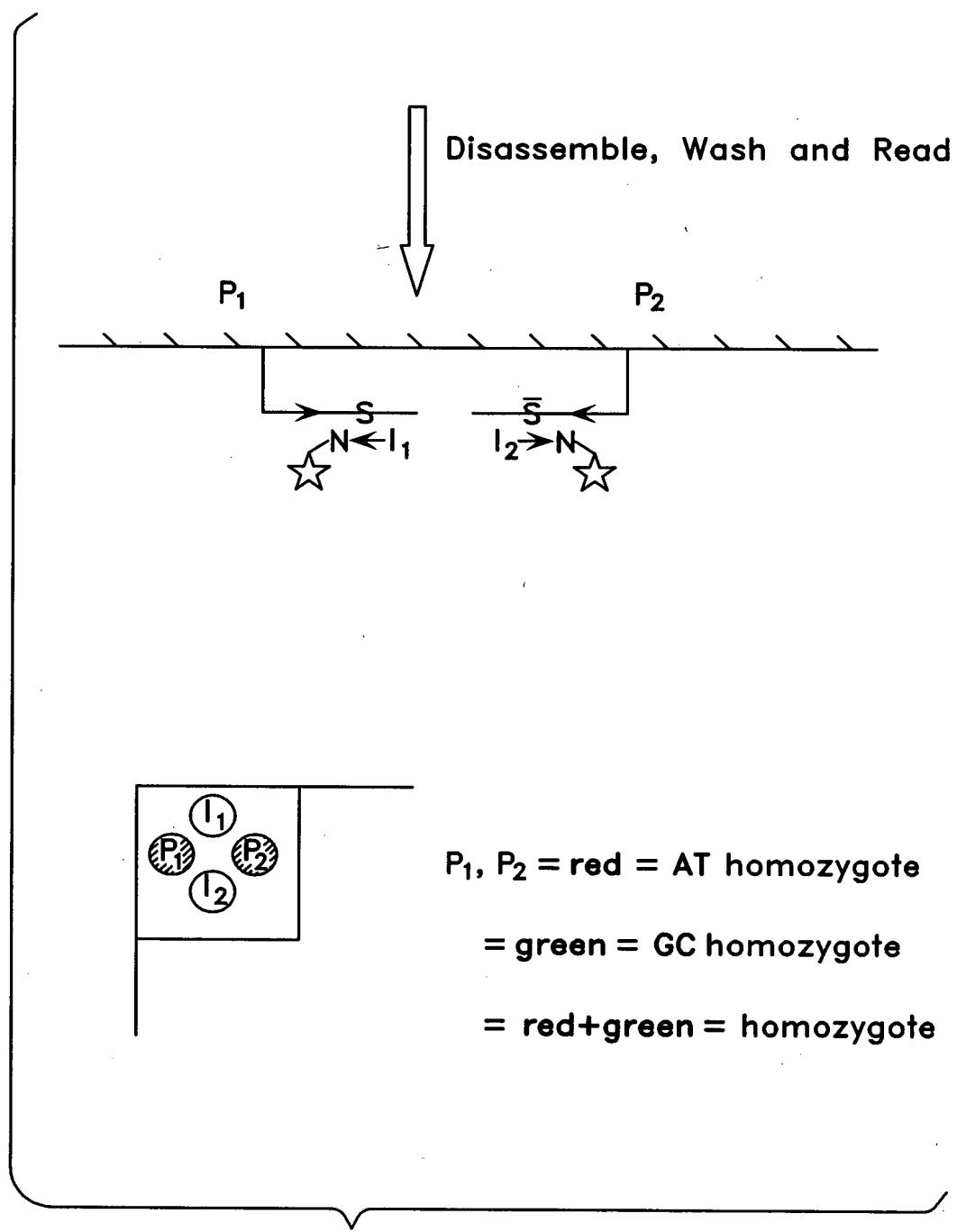
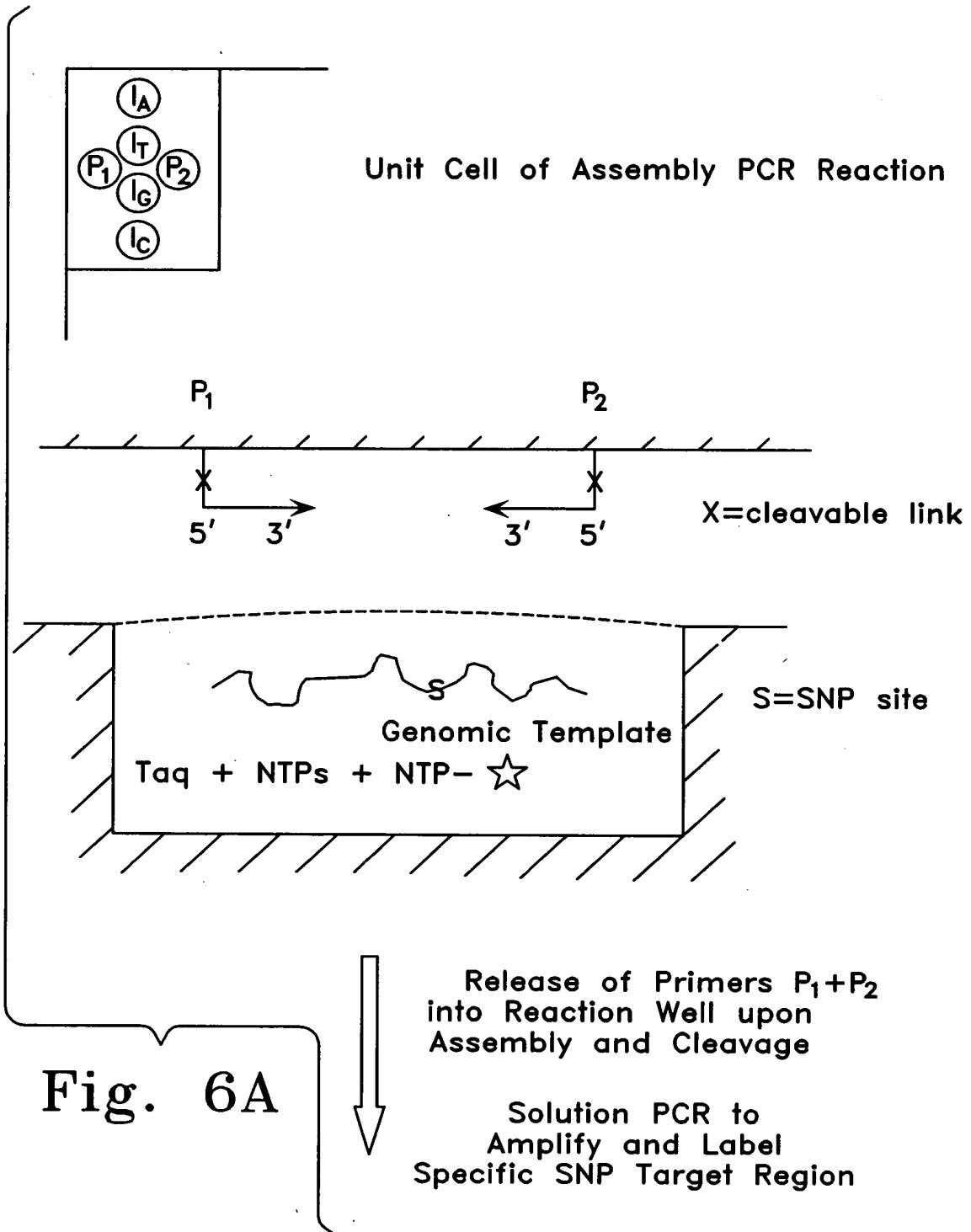
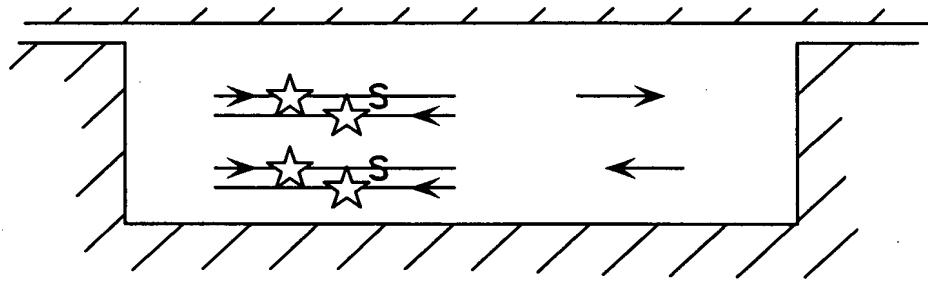


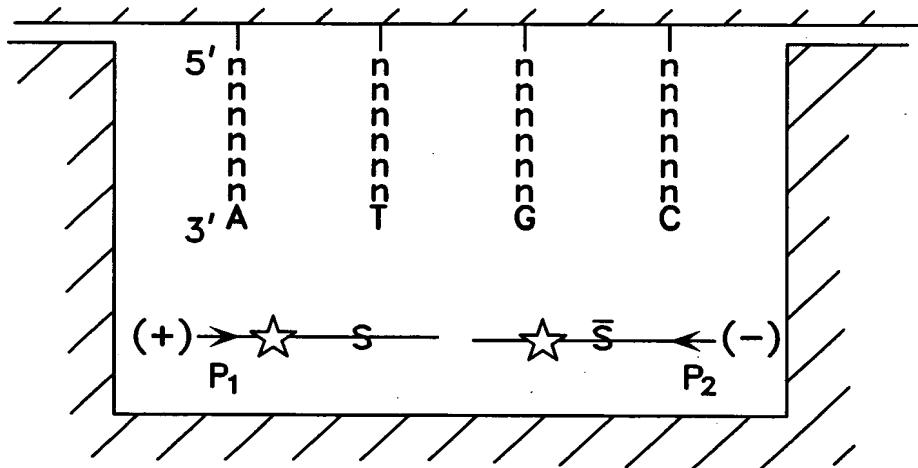
Fig. 5D



12/30



Annealing of Labeled
PCR Product back to
SNP Specific Probes



A/G pair interrogates {+} strand
T/C pair interrogates {-} strand

Fig. 6B

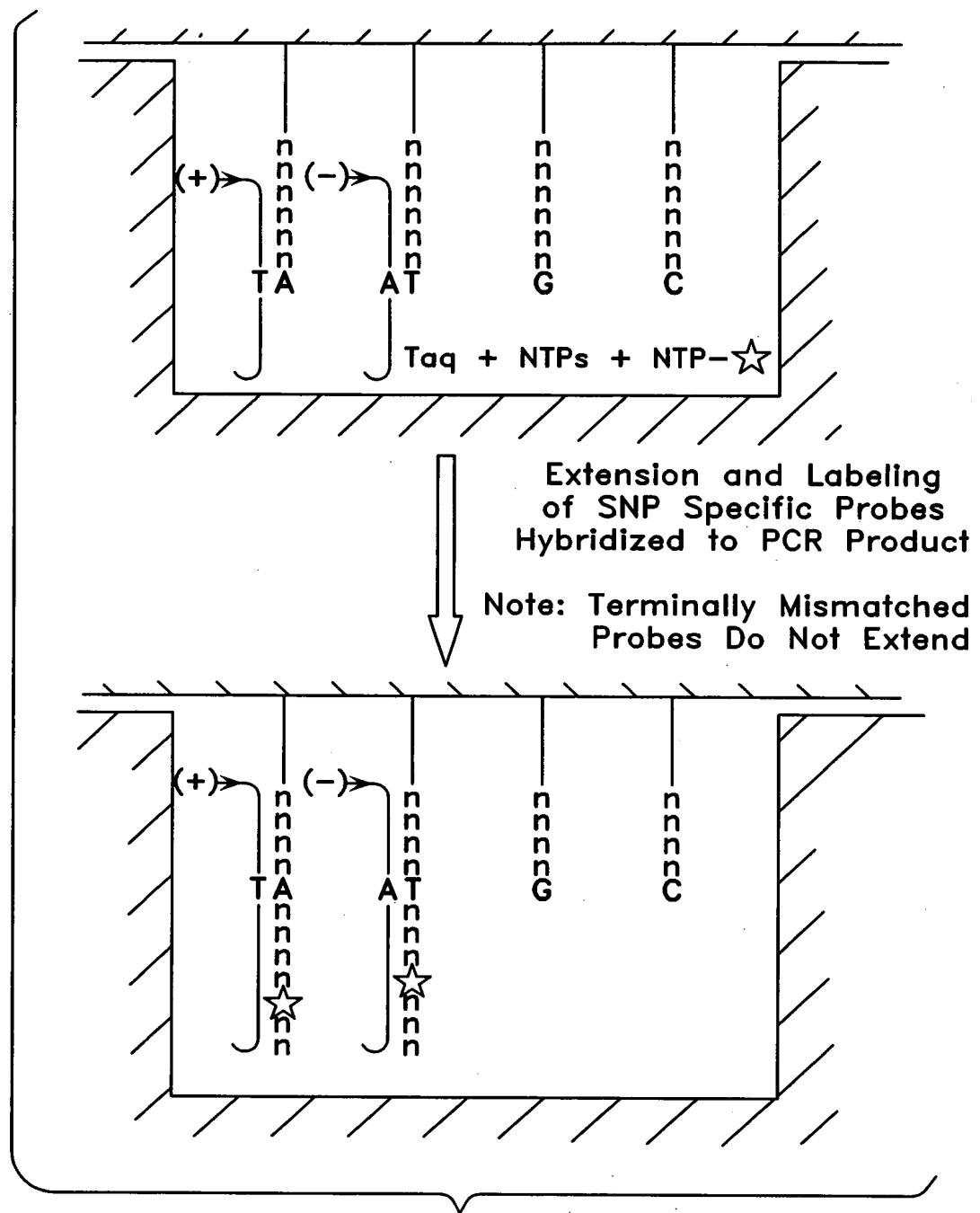


Fig. 6C

14/30

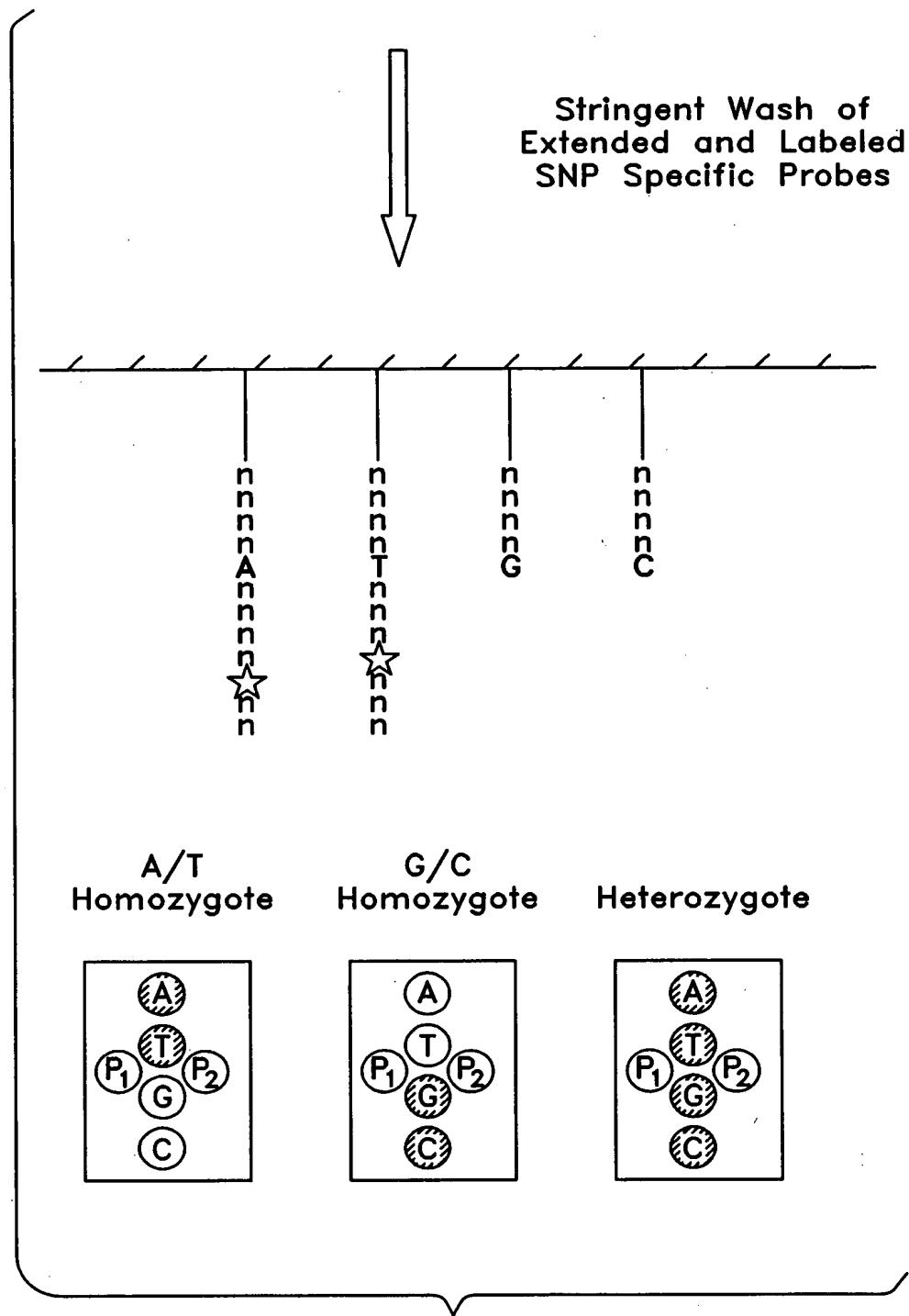


Fig. 6D

15/30

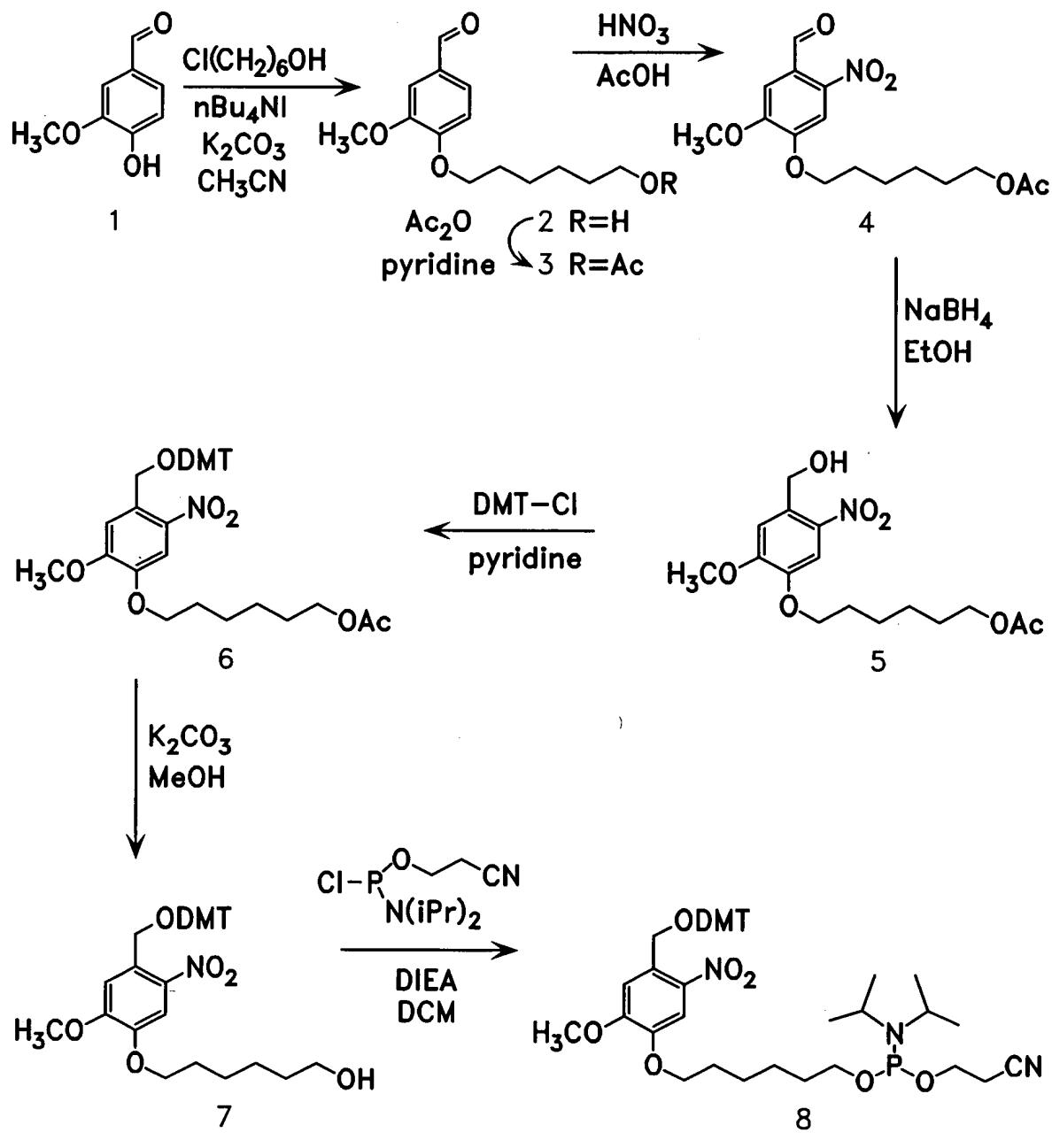


Fig. 7

16/30

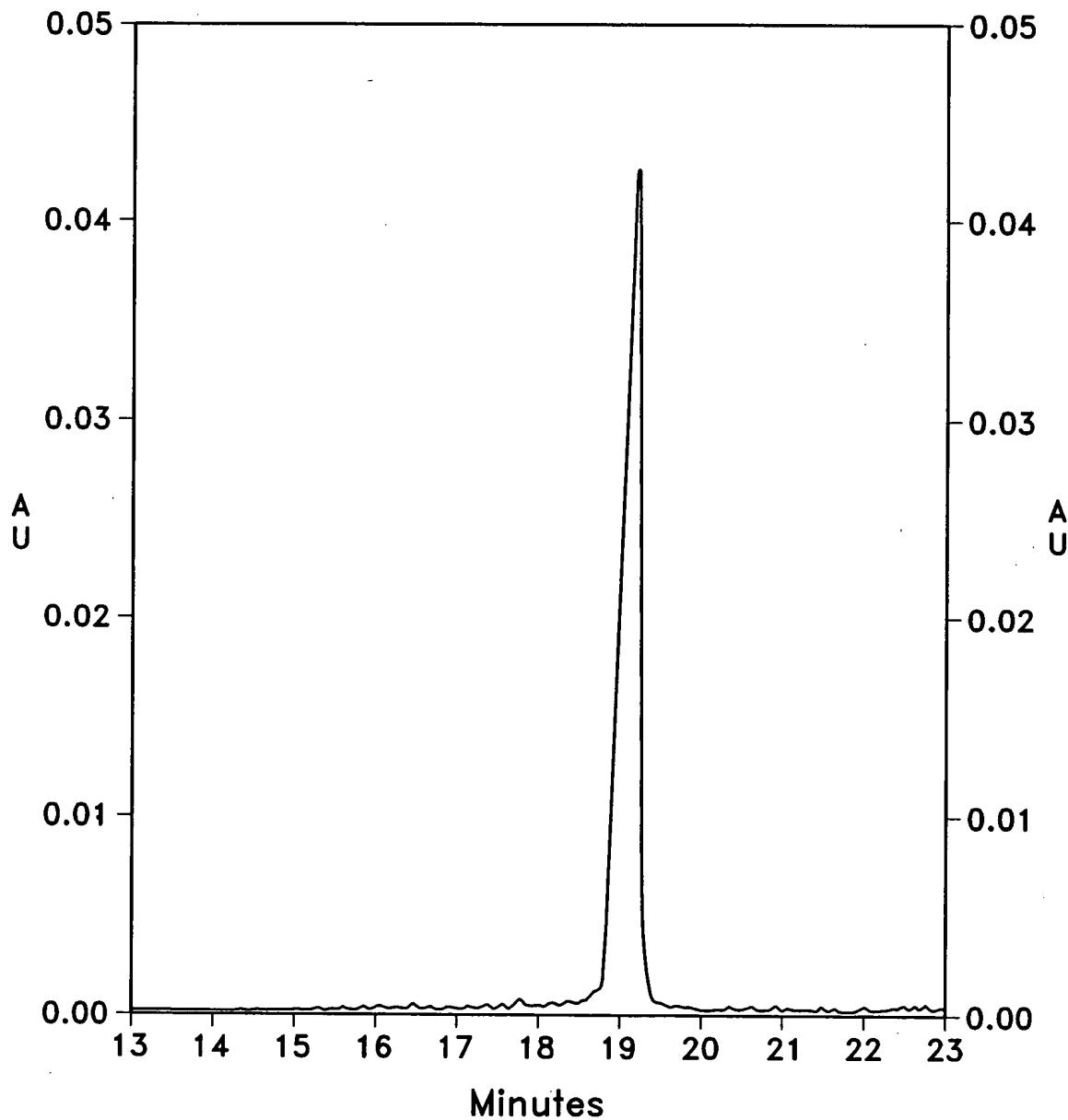


Fig. 8

17/30

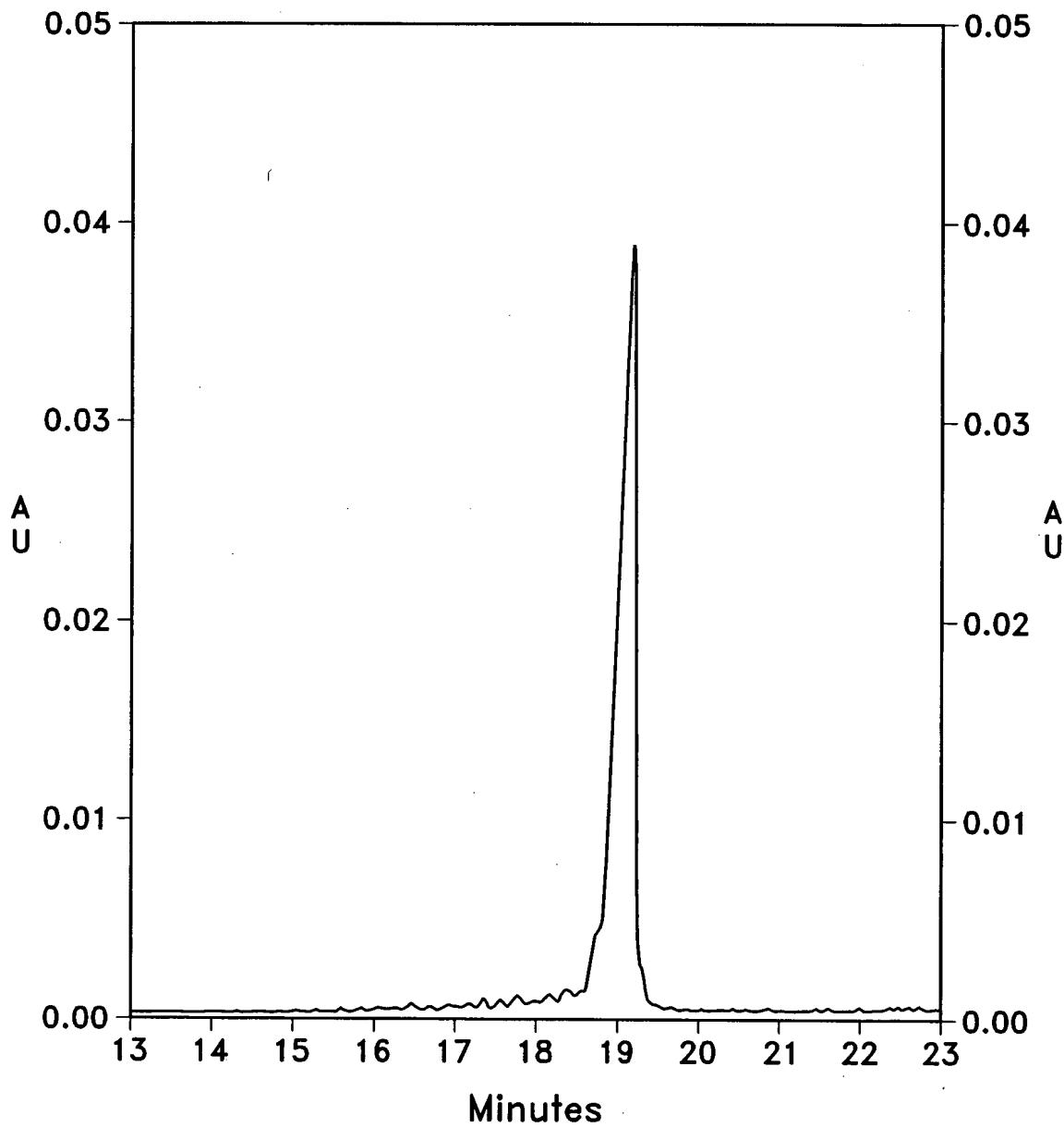


Fig. 9

18/30

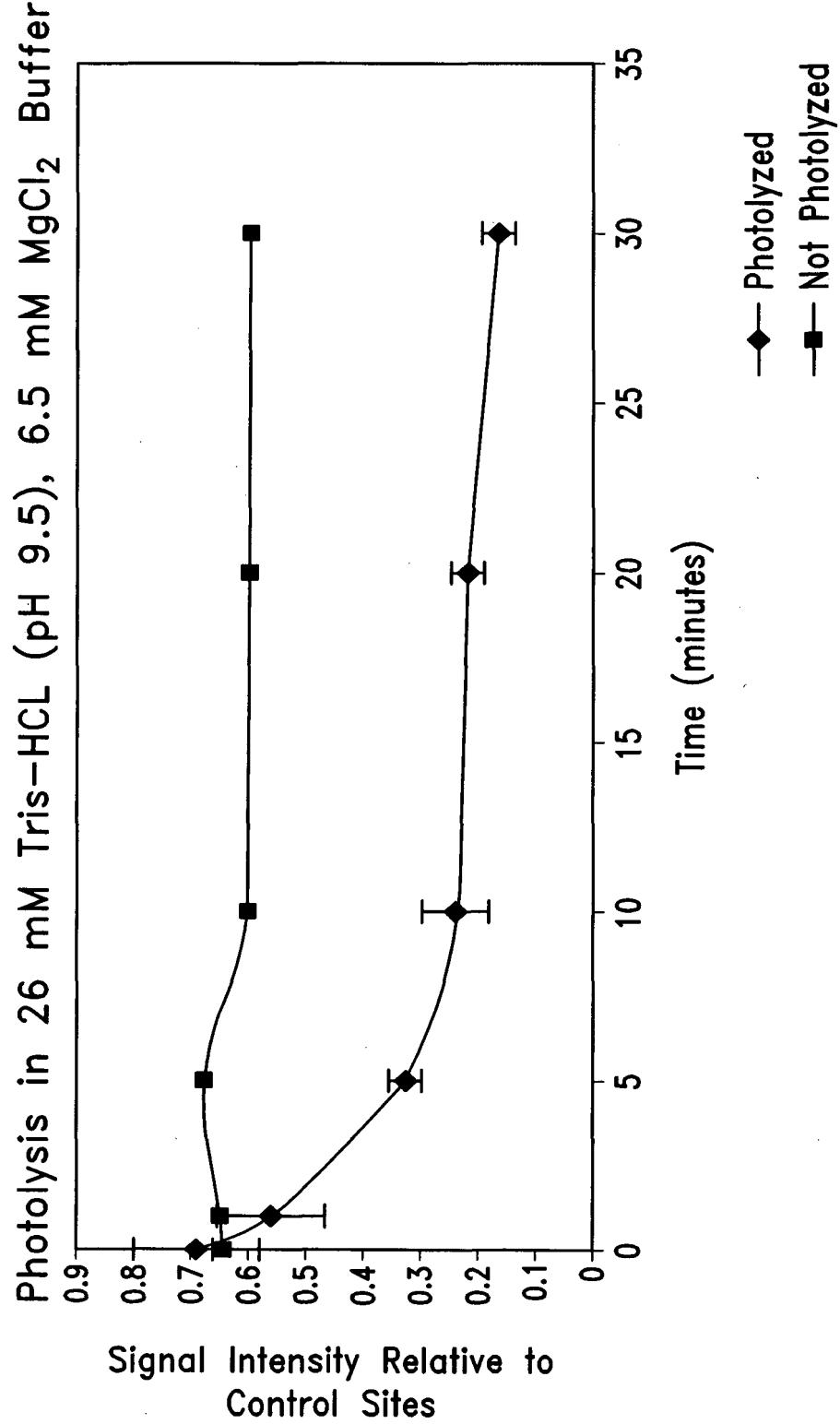


Fig. 10

19/30

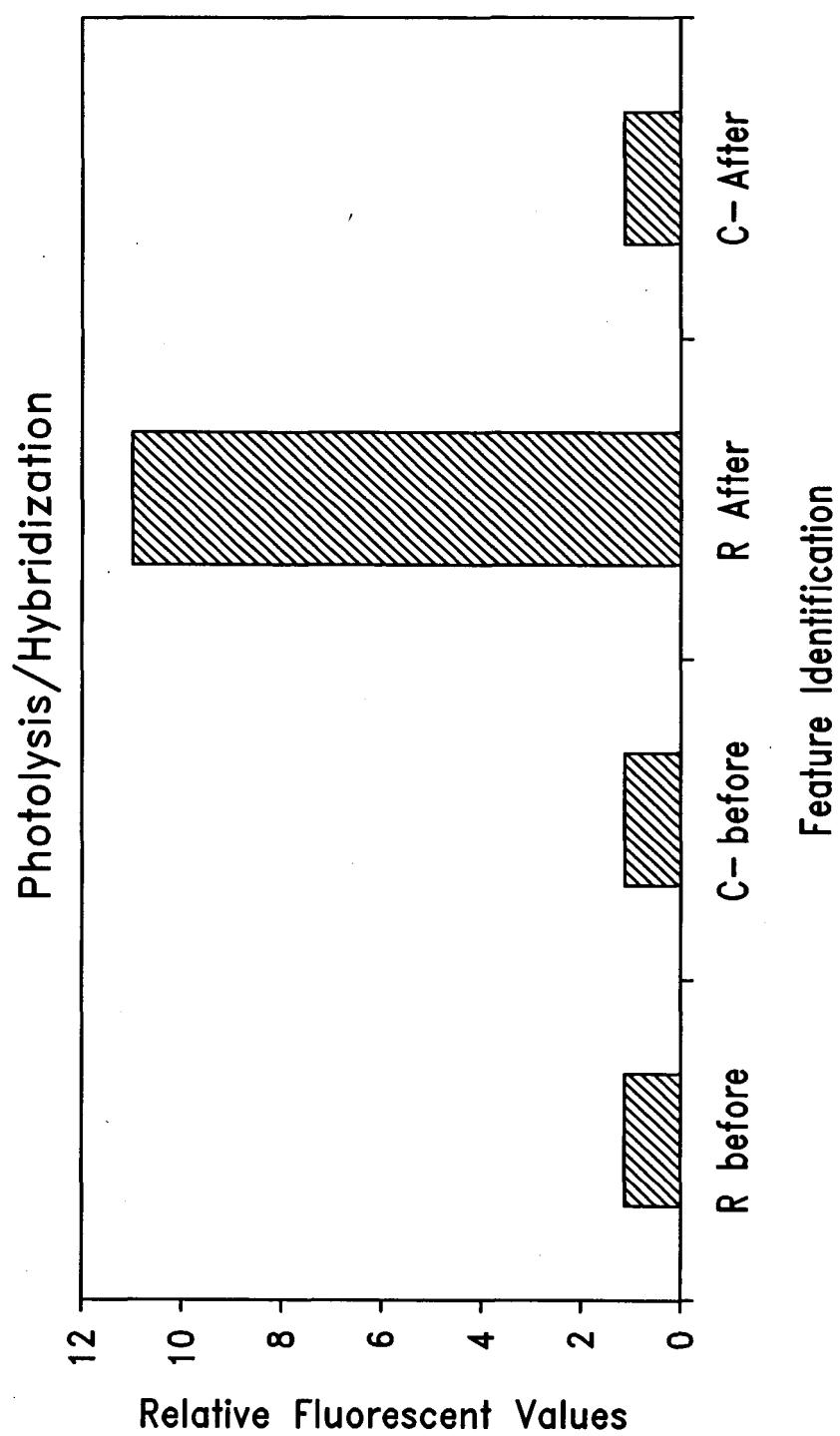


Fig. 11

20/30

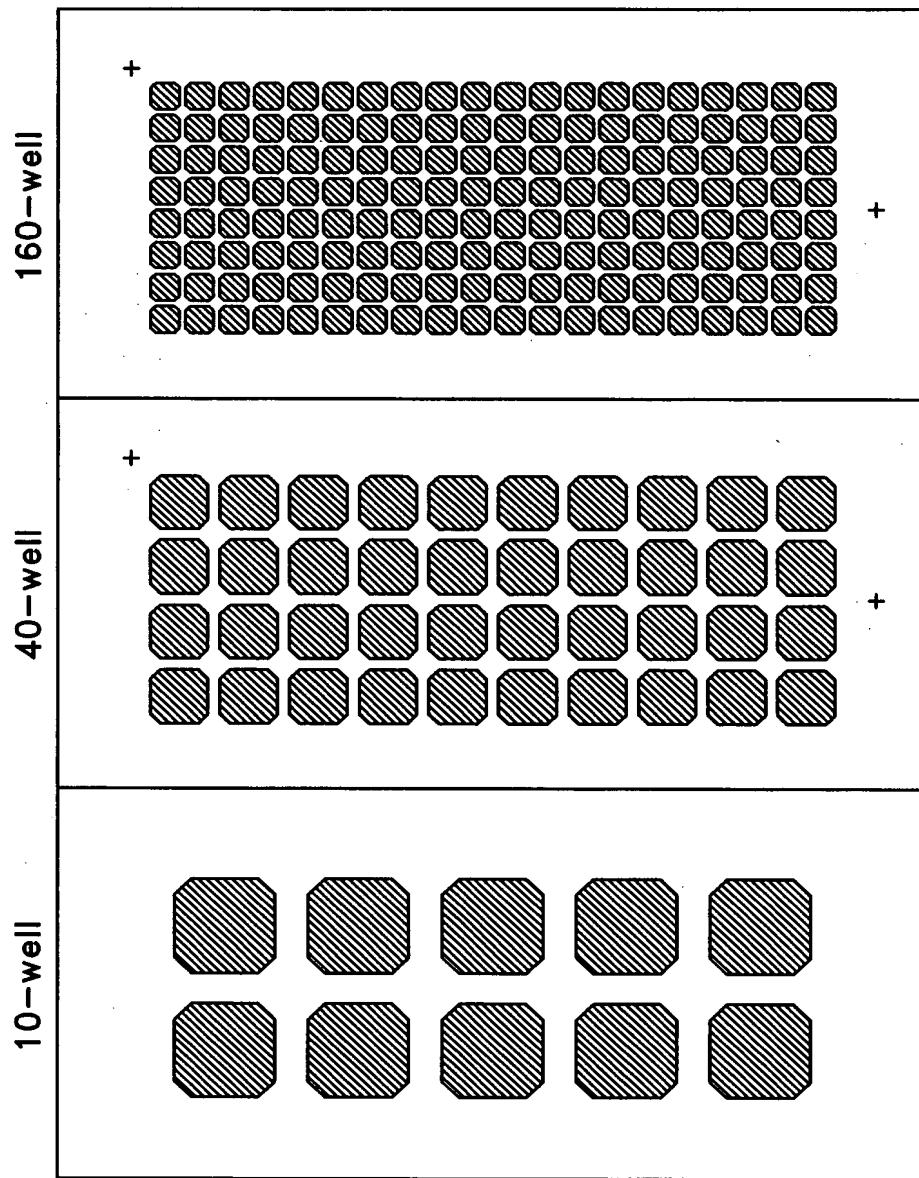


Fig. 12

R F R F R	R F R F R
F PC1 F PC2 F	F PC1 F PC2 F
R C+ R C- R	R C+ R C- R
F PN1 F PN2 F	F PN1 F PN2 F
R F R F R	R F R F R

R F R F R	R F R F R
F PC1 F PC2 F	F PC1 F PC2 F
R C+ R C- R	R C+ R C- R

<u>Probe</u>	<u>Description</u>	<u>ID</u>	<u>Name</u>	<u>3-5 Sequence</u>
F	Forward primer	FPC	F191RevCmp	c _t c _a c _c c _g a _t c _t c _c g _a t _a a _a a _a
R	Reverse primer	RPRC	R191RevCmp	c _g g _g c _a g _t g _t t _t c _a a _c t _a a _c t _g
PC1	Probe coding 1	A	191C_A	C _T T _T G _A C _C C _A C _A
PC2	Probe coding 2	G	191C_G	C _T T _T G _G G _C C _A C _C
PN1	Probe non-coding 1	T	191NC_T	T _G G _G T _G G _T C _A A _G A _A
PN2	Probe non-coding 2	C	191NC_C	T _G G _G T _G G _C C _A A _G A _A
C+	Positive Control	+	F191Rev	T _T T _T A _T C _G G _A T _T C _G G _T T _G A _G
C-	Negative Control	-	F481Rev	GGAGAGAGAAGACAGTCGTCTT

Fig. 13

22/30

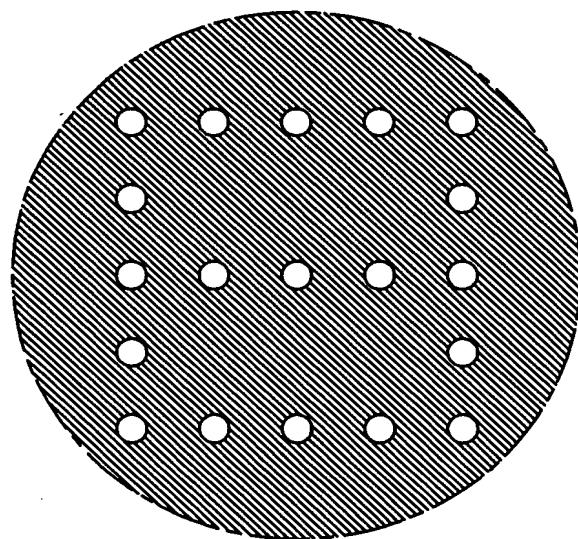


Fig. 14A

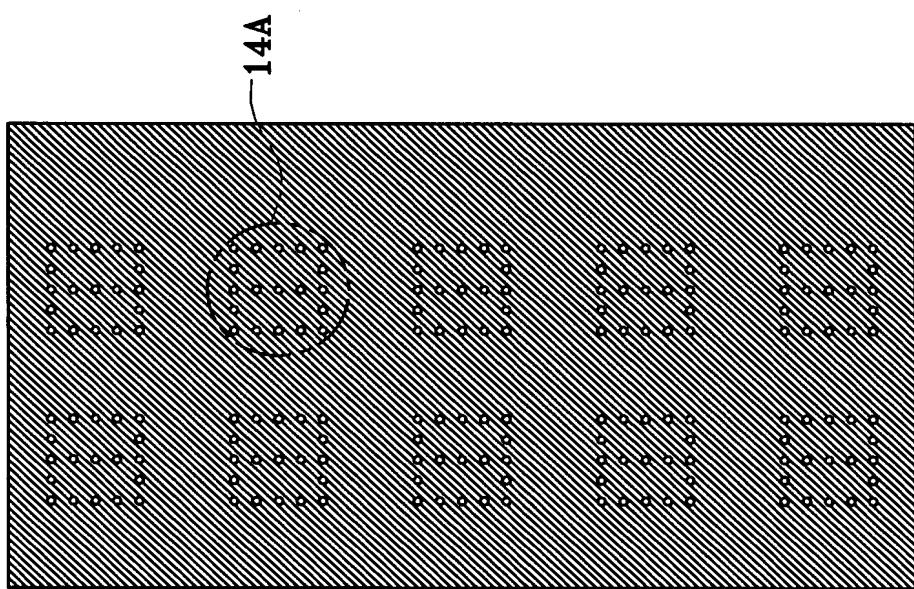


Fig. 14

Fig. 15A

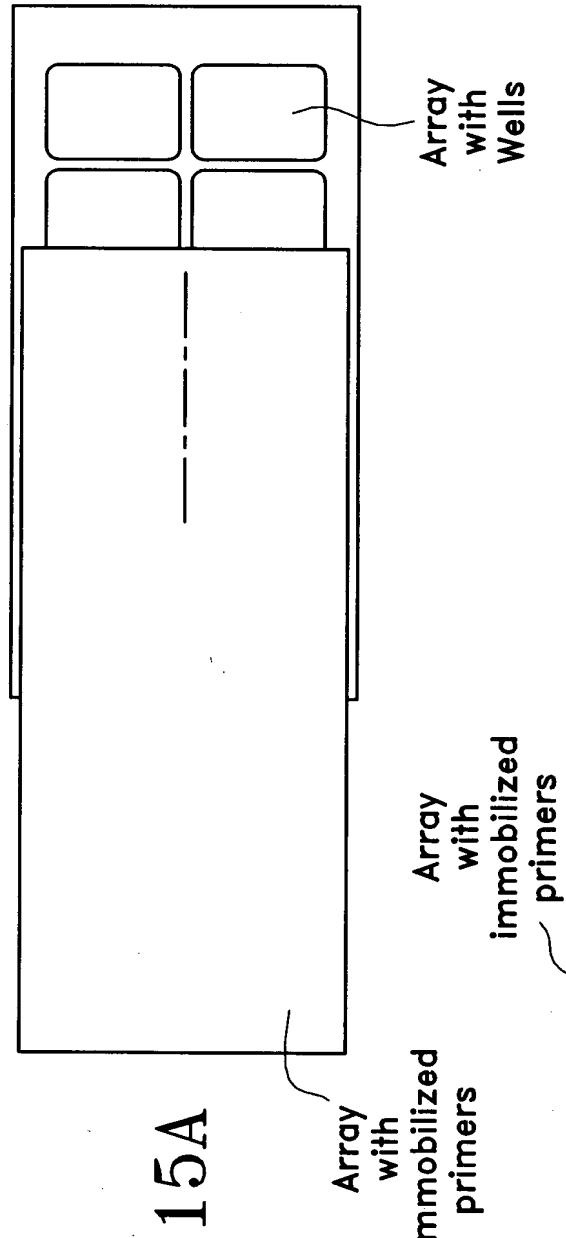
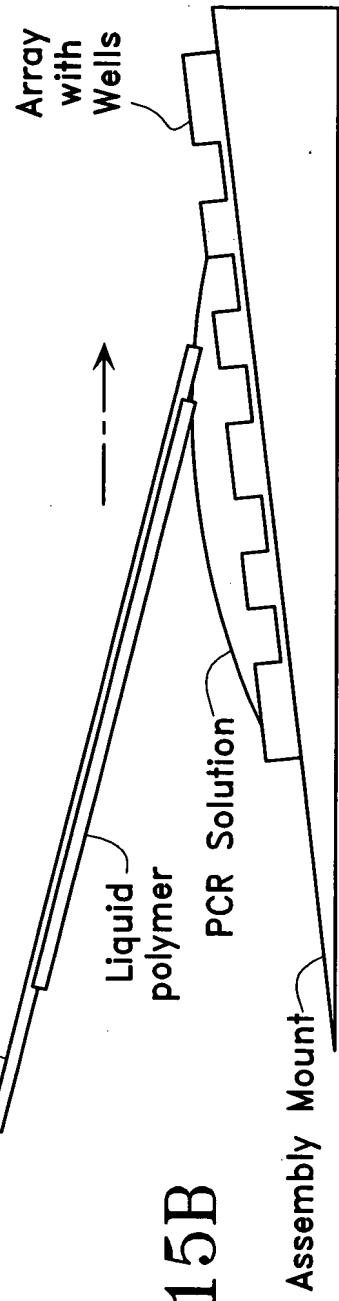


Fig. 15B



24/30

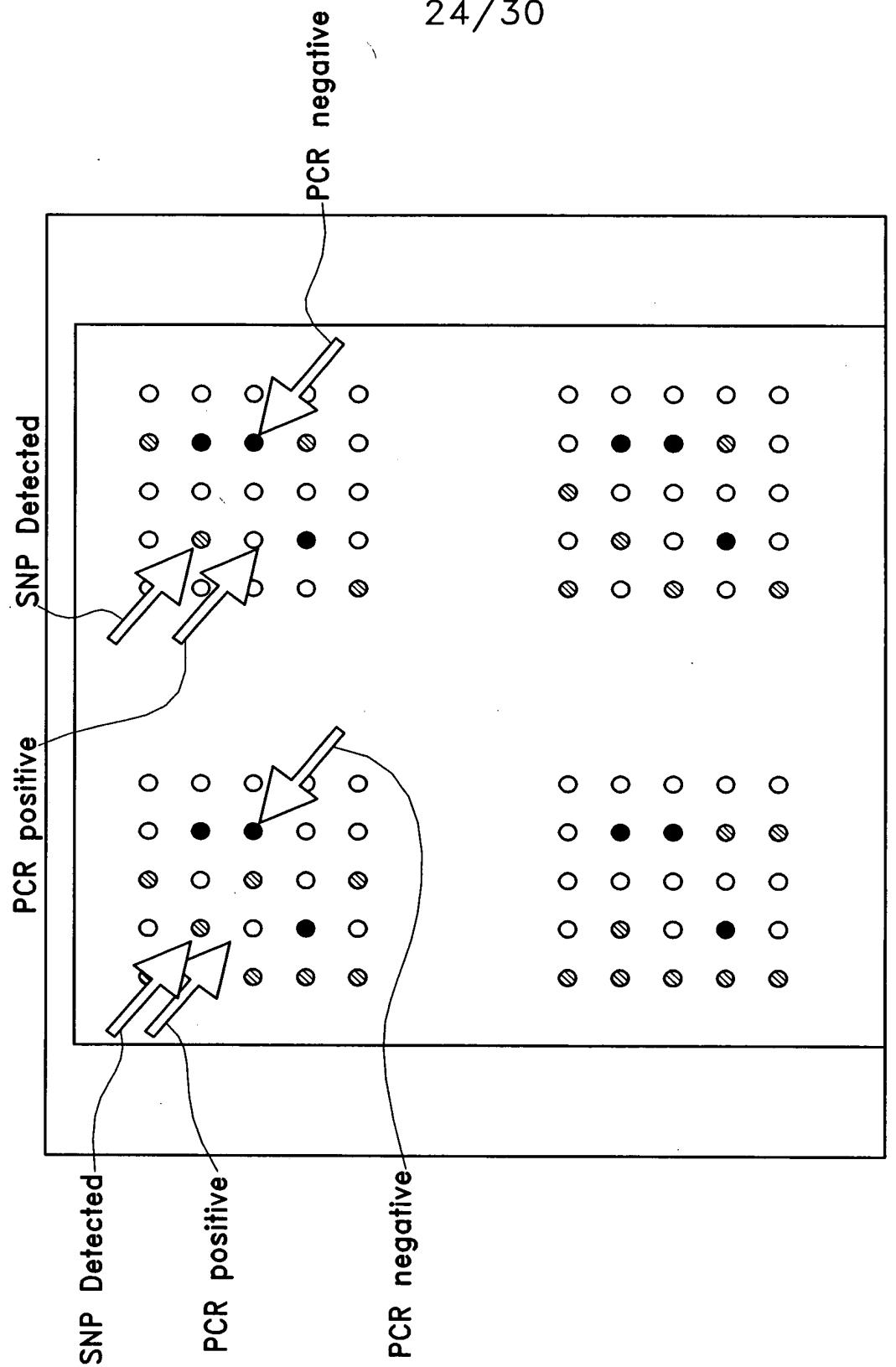


Fig. 16

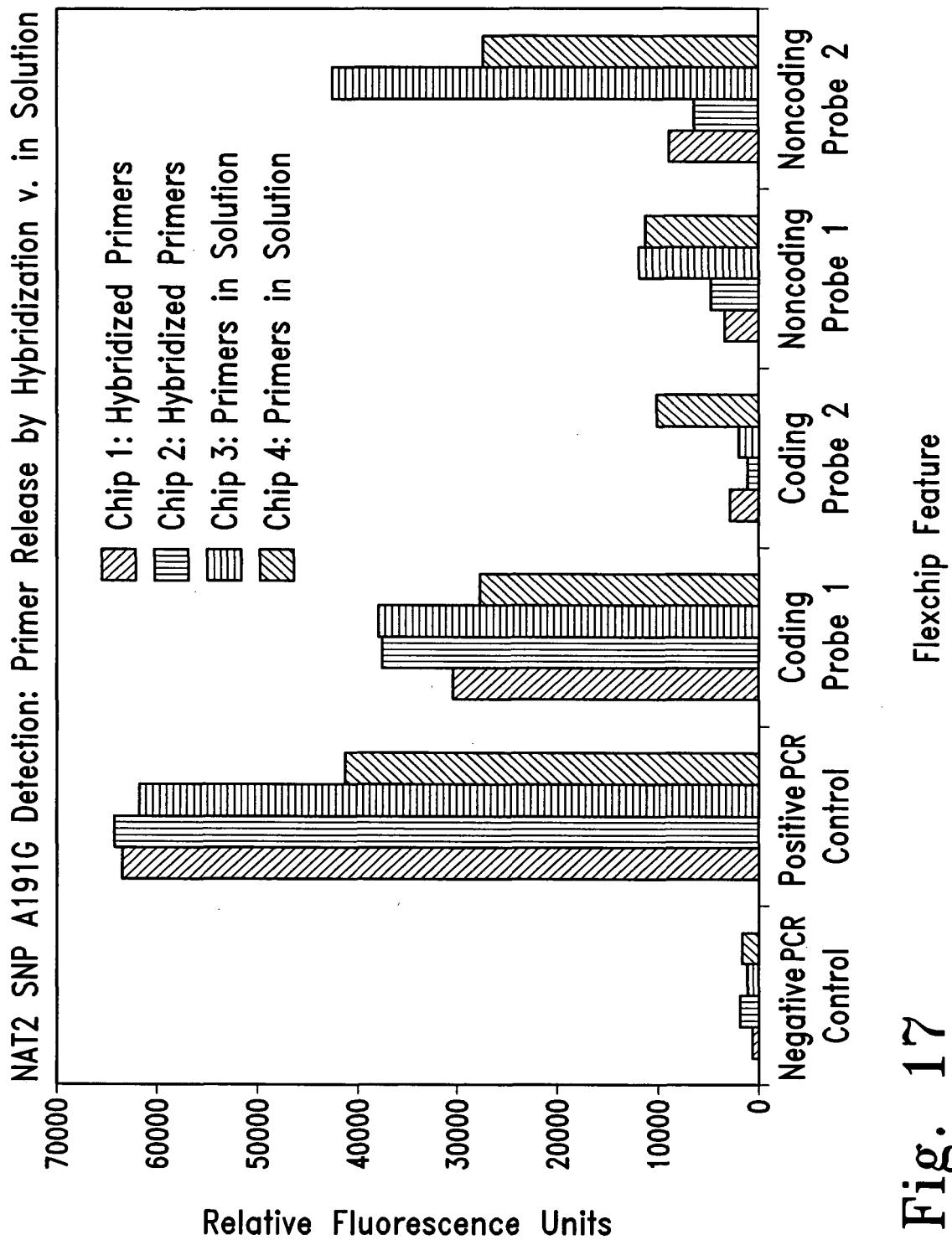


Fig. 18

Fig. 18A

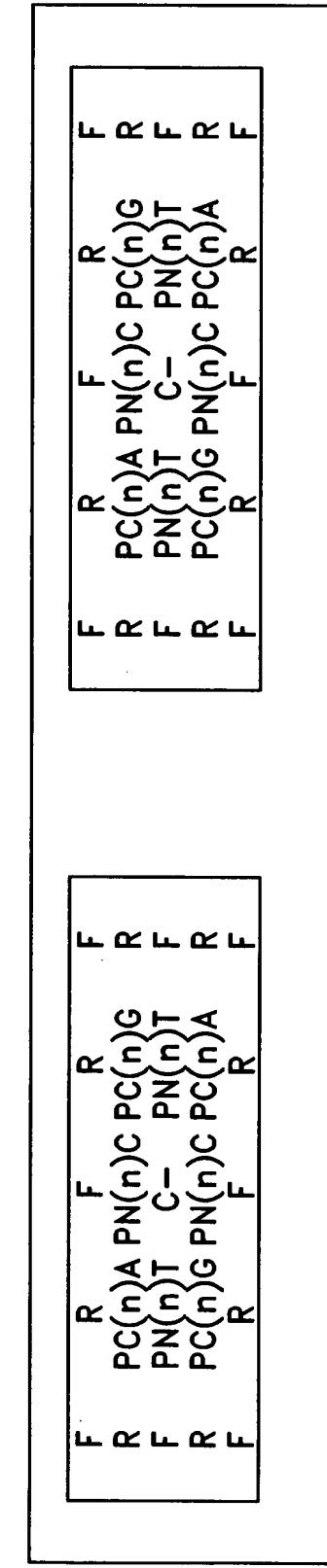
Fig. 18B



Fig. 18A

F	R	F	R	F
R	PC(n)A	PN(n)C	PC(n)G	R
F	PN(n)T	C-	PN(n)T	F
R	PC(n)G	PN(n)C	PC(n)A	R
F	R	F	R	F

F	R	F	R	F
R	PC(n)A	PN(n)C	PC(n)G	R
F	PN(n)T	C-	PN(n)T	F
R	PC(n)G	PN(n)C	PC(n)A	R
F	R	F	R	F



<u>Probe</u>	<u>Description</u>	<u>ID</u>	<u>Name</u>	<u>3-5 Sequence</u>
F	Forward primer	+	CompF	AAAATAGCCTAAGCCCCAACTC
R	Reverse primer	+	CompR	GTCAATCAACTTCTGTAAGGGC
PC(n)A	Probe coding (n) A	A		TCACATTGTAAGAAGAACCA
PC(n)C	Probe coding (n) C	C		TCACATTGTAAGAAGAACCC
PC(n)G	Probe coding (n) G	G		TCACATTGTAAGAAGAACCG
PC(n)T	Probe coding (n) T	T		TCACATTGTAAGAAGAACCT
PN(n)A	Probe non-coding (n) A	A		GAGACACCACCCACCCA
PN(n)C	Probe non-coding (n) C	C		GAGACACCACCCACCCC
PN(n)G	Probe non-coding (n) G	G		GAGACACCACCCACCCG
PN(n)T	Probe non-coding (n) T	T		GAGACACCACCCAC CCT
PC(n-1)A	Probe coding (n-1) A	A		TGATCACATTGTAAGAAGAACCA
PC(n-1)C	Probe coding (n-1) C	C		TGATCACATTGTAAGAAGAACCC
PC(n-1)G	Probe coding (n-1) G	G		TGATCACATTGTAAGAAGAACG
PC(n-1)T	Probe coding (n-1) T	T		TGATCACATTGTAAGAAGAACCT
PN(n-1)A	Probe non-coding (n-1) A	A		GGAGACACCACCCACCA
PN(n-1)C	Probe non-coding (n-1) C	C		GGAGACACCACCCACCC
PN(n-1)G	Probe non-coding (n-1) G	G		GGAGACACCACCCACCG
PN(n-1)T	Probe non-coding (n-1) T	T		GGAGACACCACCCACCT
C-	negative control	-	(ACTG)	ACTGACTGACTGACTG

Fig. 18B

28/30

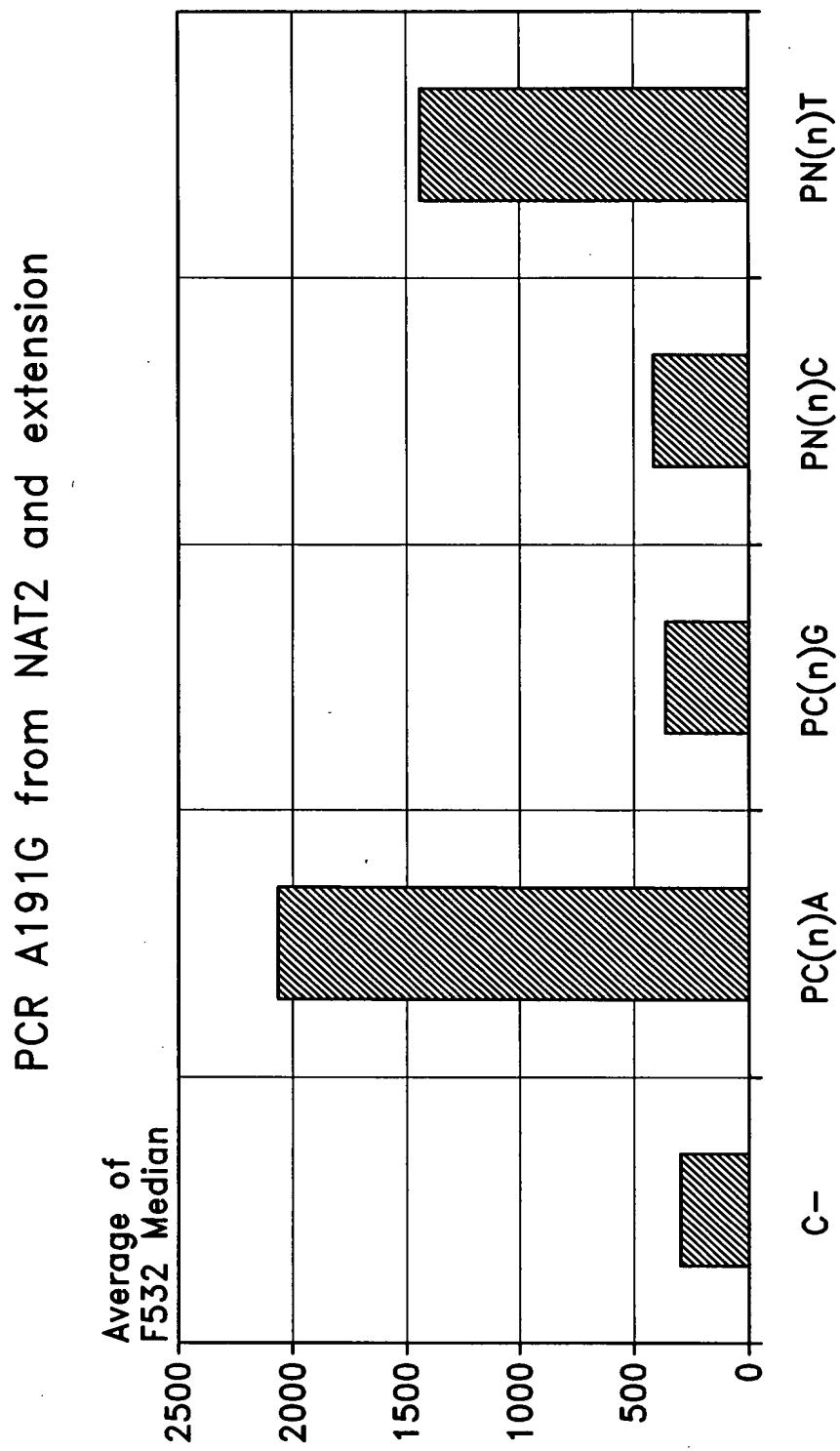


Fig. 19

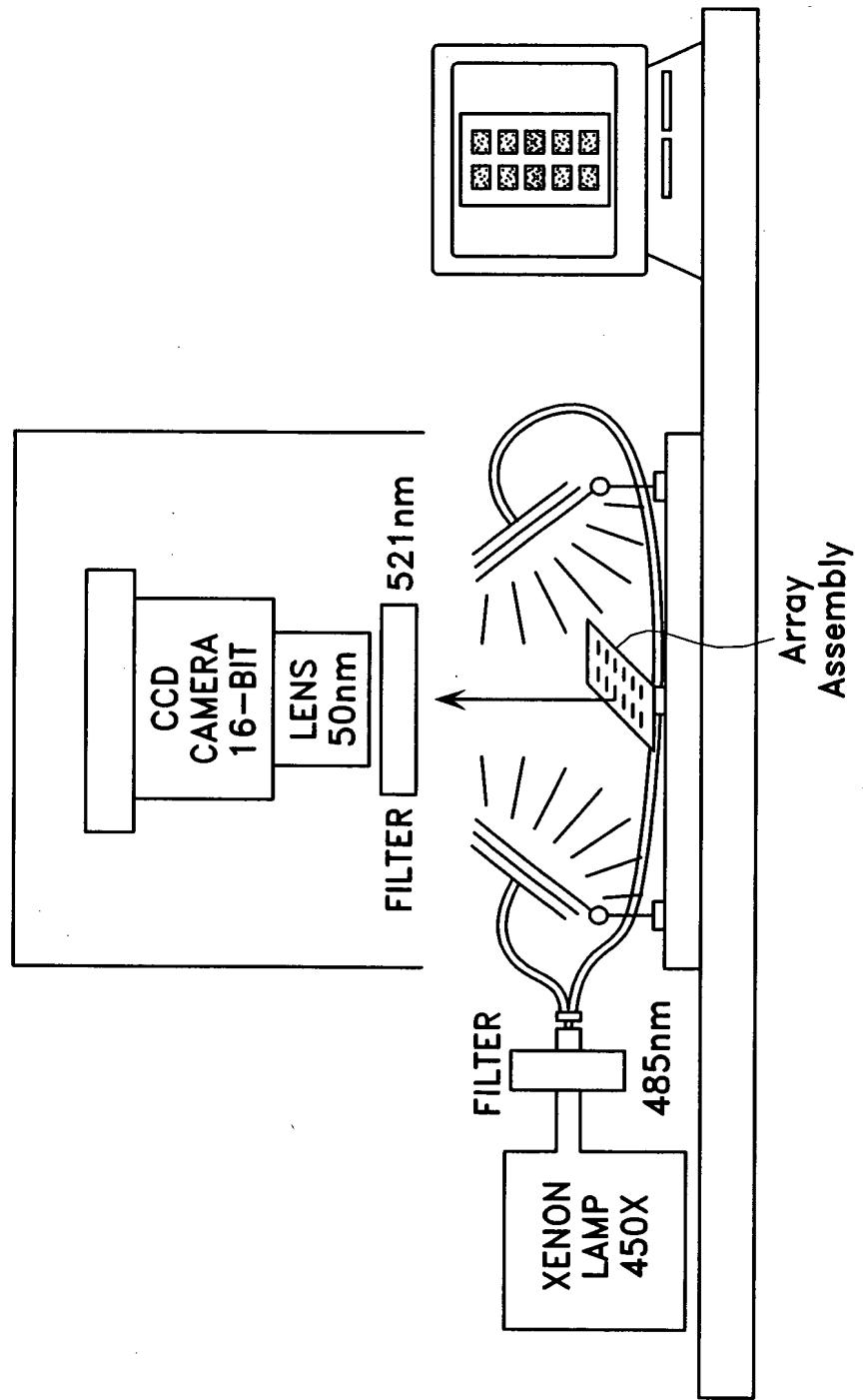


Fig. 20

30 / 30

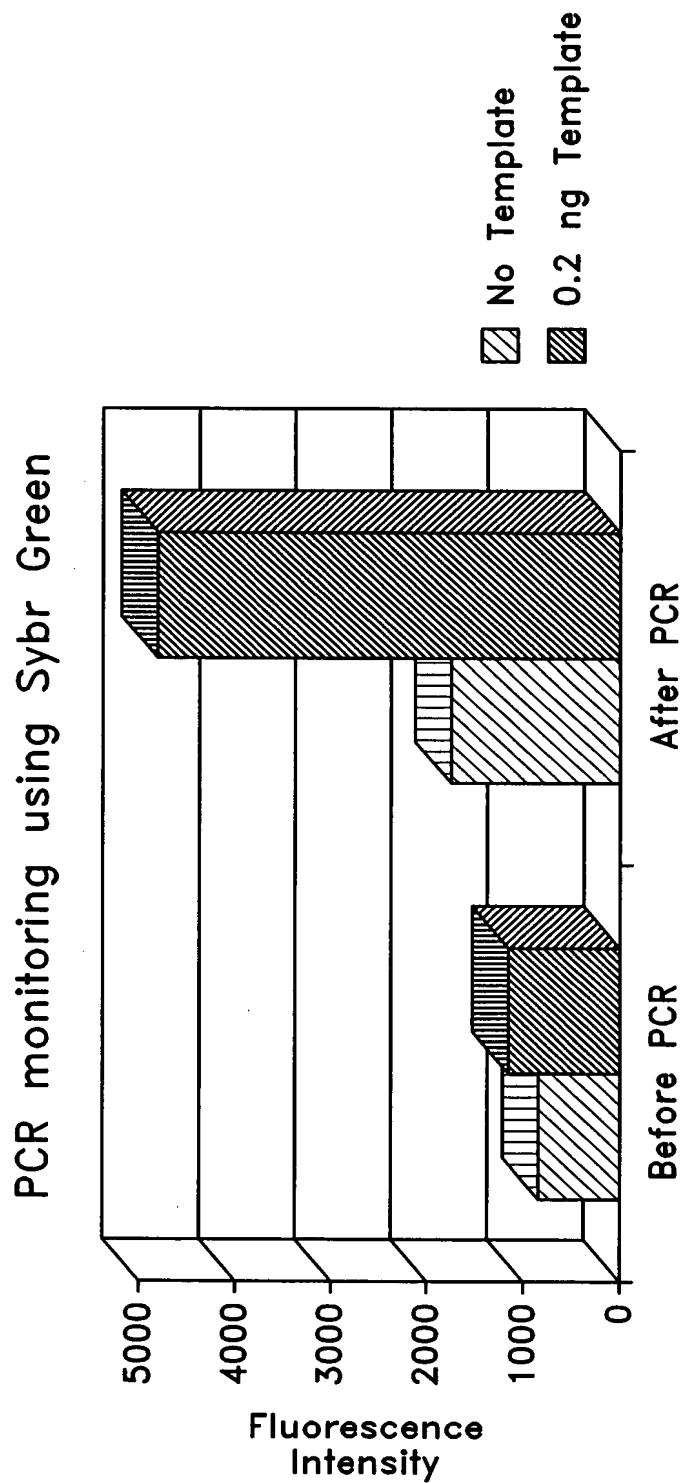


Fig. 21